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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,579	09/27/2000	Jun-ichi Matsuda	040425/0147	6134

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EXAMINER

SORRELL, ERON J

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 04/08/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/671,579

Applicant(s)

MATSUDA, JUN-ICHI

Examiner

Eron J Sorrell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. These claim are omnibus type claims. The metes and bounds of these claims cannot be accurately determined, therefore the Examiner cannot apply a prior art rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-3,5-8, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Hattig (U.S. Patent No. 6,466,549).

5. Referring to claim 1, Hattig discloses a device information acquisition method for acquiring device information in which a function of devices is written from the devices connected to a network constituted by a single bus which is a local bus to which the devices are connected or a network formed by connecting, through the bridges, a plurality of busses including the local bus and remote buses to which the devices are not connected, comprising:

the discrimination step of discriminating whether the network is constituted by a plurality of buses or a single bus (see lines 27-47 of column 4);

the bus ID acquisition step of acquiring a bus ID assigned to each of the remote busses (see lines 27-47 of column 4);

the information acquisition step of acquiring device information from all devices connected to the network (see lines 27-47 of column 4);

the information discarding step of, when at least one of the remote busses is disconnected from the network, discarding device information of devices connected to the remote bus (see lines 58-67 of column 4 and lines 1-7 of column 5);

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wherein if it is discriminated in the discrimination step that the network is constituted by a single bus, the information acquisition step is executed with respect to all of the devices connected to the local bus (see lines 23-50 of column 5); and

if it is discriminated in the discriminating step that the network is constituted by a plurality of buses, the information acquisition step is executed with respect to all devices connected to the busses each having the bus ID acquired (see lines 23-50 of column 5).

6. Referring to claim 2, Hattig discloses receiving discovery information for all of the devices connected to the network (see abstract). If discovery of a bridge is made, then the network must comprise a plurality of buses.

7. Referring to claim 3, Hattig discloses assigning ID numbers to the buses based on the total number of buses (see lines 23-50 of column 5). Hence when a bus ID greater than 1 is acquired, during the bus ID acquisition step, the network comprises a plurality of buses.

8. Referring to claims 5, 7, and 8, Hattig discloses at least on bus ID management node for managing bus ID usage information

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in which all bus IDs assigned to at least one bus constituting the network is connected to the network, at least one identifier management node for managing the identifiers, acquired by performing the identifier acquisition step with respect to the devices connected to each bus, by writing the identifiers in identifier usage information is connected to each of the bussed of the network, and at least one device information holding node for holding device information acquired in the device information acquisition step with respect to each of the devices connected to each bus.

The discovery devices disclosed by Hattig, functions as the bus ID management node, the identifier management node and the information holding device (see lines 8-22 of column 5).

9. Referring to claim 6, Hattig discloses the information acquisition step comprises:

the identifier acquisition step of acquiring an identifier assigned to each of the devices connected to the buses of the network; and

the individual device information acquisition step of acquiring the device information from each device identified by the identifier acquired in the identifier acquisition step (see lines 58-67 of column 4 and lines 1-7 of column 5).

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10. Referring to claim 14, Hattig discloses the method further comprises updating the acquired device information by periodically performing the discrimination step, the bus ID acquisition step, and the information acquisition step (see lines 8-22 of column 5).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattig.

13. Referring to claim 9, Hattig fails to teach an initialization notification request step of requesting the node connected to the remote bus to notify occurrence of the initialization in each of the remote buses, and the information

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acquisition step is performed again with respect to each of the devices connected to the remote bus upon reception of a notification to the initialization request step. Hattig does disclose that this method is well-known in the art as a means of forwarding the initialization requests (see lines 11-25 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Hattig such that it comprises an initialization notification request step of requesting the node connected to the remote bus to notify occurrence of the initialization in each of the remote buses, and the information acquisition step is performed again with respect to each of the devices connected to the remote bus upon reception of a notification to the initialization request step because Hattig suggests this method is well-known and an accurate bus topology can be maintained even if there are a plurality of buses.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattig in view of Scheel et al. (U.S. Patent No. 6,445,711 hereinafter referred to as Scheel).

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15. Referring to claim 4, Hattig fails to disclose each of the bridges receives an asynchronous packet on the local bus and holds forwarding information for determining whether to forward the asynchronous packet to the remote buses, and the bus ID acquisition step comprises acquiring forwarding information from all of the bridges connected to the local bus.

Scheel discloses the bridges receiving an asynchronous packet on the local bus and holds forwarding information for determining whether to forward the asynchronous packet to the remote buses (see lines 6-52 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Hattig such that it comprises the bridges receiving an asynchronous packet on the local bus and holds forwarding information for determining whether to forward the asynchronous packet to the remote buses so the packets can be received by the appropriate node even if it is on a different bus.

Allowable Subject Matter

16. Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

The following references have been cited because they disclose the type of information sent out by nodes on an IEEE-1394 network after bus initialization:

U.S. Patent No. 6,374,316 to James et al.

U.S. Patent No. 6,519,671 to Kondou et al.

U.S. Patent No. 6,408,355 to Toguchi

U.S. Patent No. 6,286,067 to James et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A Gaffin can be reached on 703 308-3301. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703 746-7239 for regular communications and 703 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

EJS
April 2, 2003



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100